# **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

			(*
			•
Q.,			
A			

MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY UNITED STATES DEPARTMENT OF AGRICULTURE

Number 144

self or the

M(10.)

April, 1926

A MAY 19 1926

U. S. Department of Atriculture

### VISITS FROM FOREIGN ENTOMOLOGISTS

Niils A. Vappula, of the Agricultural Institute of Finland, has been visiting the Bureau of Entomology for a few weeks. He has been sent to America by his government to investigate our methods in economic entomology, and expects to take a long trip, visiting some of the Bureau stations and some of the other entomological centers. Field men will be on the lookout for Mr. Vappula.

Dr. R. J. Tillyard, Chief of the Entomological Department of the Cawthron Institute of Nelson, New Zealand, and Mrs. Tillyard were in Washington for a few days in the early part of April. Doctor Tillyard landed at Vancouver in March, and visited several points of entomological interest on his way east. He sailed from Boston for England May 1. Doctor Tillyard spoke before the Entomological Society of Washington, at a special meeting held in his honor, on the subject of fossil insects; and at a luncheon given to him by some of the men in the Bureau he talked at some length on the subject of the problems of New Zealand in economic entomology.

L. F. Hitchcock, Biologist of the Commonwealth Prickly-Pear Board of Australia, and Mrs. Hitchcock visited the Bureau of Entomology early in April. Mr. Hitchcock is to take up the work in the United States and Mexico in relation to the insect enemies of the prickly-pear. He reports that a number of the introductions into Australia made by his predecessors in this country have been successful and that they hope that the Opuntia problem will be solved in this way.

D. Morland, Apiarist of the Rothamsted Experimental Station, arrived in Washington on the 30th of April. He will spend some time at the Bee Culture Laboratory, studying our methods, and will later go to Ithaca for further study, under Doctor Phillips; still later he will visit western points of interest to advanced beekeepers.

BEZINGEL AND THE A THE TOTAL THE PARTY OF

# CEREAL AND FORAGE INSECT INVESTIGATIONS

## W. H. Larrimer, Entomologist, in Charge

George I. Reeves visited the University of Nevada, at Reno, the first week of April, to arrange cooperative work on the alfalfa weevil.

Curtis Benton, who has been employed in the control operations on the European corn borer, was transferred on April 1, to assist in the Hessian fly investigations at the West Lafayette, Ind., laboratory.

Prof. and Mrs. Dwight Sanderson and Prof. and Mrs. Jno. H. Comstock were recent visitors at the corn borer parasite laboratory at Hyères, France.

Dr. W. H. Larrimer visited New York City April 15 for consultation with L. H. Worthley on the control of the European corn borer.

About the middle of April J. R. Horton made a survey of insect conditions in Western Oklahoma and northeastern New Mexico.

Recent visitors at the Corn Borer Laboratory, at Arlington, Mass., were Dr. H. W. Alberts, Dept. of Agronomy, University of Wisconsin, and S. S. Crossman, C. Walter Collins, and Russell Holbrook, of the Gipsy Moth Laboratory at Melrose Highlands, Mass.

A total of four imported corn borer parasites have been recovered, namely <u>Fulimmeria crassifemur Thom.</u>, <u>Microgaster tibialis</u> Nees, <u>Phaeogenes planifrons Wesm.</u>, and <u>Exoristes roborator</u> Fab. The last named species has been recovered in Ohio and western New York, as well as at several points in New England.

No teworthy winter shipments of parasites from France to the European corn Borer Laboratory at Arlington have been as follows: 34,816 Microgaster tibialis Nees, 13,191 Eulimneria crassifemur Thom., and 355,400 host larvae from which four other species of parasites will be reared.

D. J. Caffrey has started work in the Bono, Ohio, district, in connection with the outdoor corn borer experiments which he inaugurated in that section last year. He has also been traveling in southern Michigan, where cooperative experiments will be carried on with agronomists and entomologists of the Michigan State College, dealing with the corn borer investigational work. Mr. Caffrey also visited Mr. H. N. Barley, at the Silver Creek, N. Y., laboratory, and Mr. L. H. Patch, at the Sandusky, Ohio, laboratory, to confer with them in regard to the corn borer work at these points.

George W. Barber, formerly of the Corn Borer Laboratory at Arlington, Mass., has been transferred for duty at the Charlottesville, Va., laboratory, to assist in jointworm experiments, under the direction of Dr. W. J. Phillips.

Dettmar W. Jones, of the Arlington, Mass., laboratory, visited the Chathan, Ontario, laboratory early in April, to confer with A. B. Baird, of the Dominion Department of Agriculture, relative to the technique of handling parasites of the European corn borer.

Lawrence L. Peirce of Arlington, Mass., has been temporarily assigned to assist L. H. Patch in the corn borer investigations at the Sandusky, Ohio, laboratory during the present season.

then I was timmed on out to training

TO AFRICA CODE TEACHER

TO BEEC. LOCAL CO.

#### TAXONOMIC INVESTIGATIONS

# I write many an harmone that he will be accorded to the second S. A. Rohwer, Entomologist, in Charge papels scorey losts a layout

- H. F. Schwarz, of the American Museum of Natural History, spent two days early in April in the Division of Insects, studying the collection of bees belonging to the subfamily Anthidiinae. He is preparing a paper on the bees of this group as based on the collection in the American Museum, and found it necessary to consult types in the collection of the Museum.
- Dr. J. Chester Bradley, of Cornell University, arrived April 30 to spend two days in the museum discussing the problems of nomenclature with the hymenopterists. Dr. Bradley is very anxious to present certain matters to the International Commission, in the hope that they will set aside certain type designations and certain publications, so that it will not be necessary to change a number of the family names within the order of Hymenoptera.
- W. S. Fisher spent April 12 to 22 in Philadelphia, where he examined types of Buprestidae belonging to the genus Agrilus in the Academy of Natural Science. Mr. Fisher is preparing a revision of the North American buprestids belonging to the genus Agrilus, and before completing this revision it was necessary to study types of species described by Horn and other authors.

TORKERS WIT 1 April 12 to 17 Dr. H. E. Ewing made a field trip to Norfolk, Va., to study the life history and habits of chiggers. He plans to do a certain ... amount of field work on these insects during the coming summer, and to undertake a few control experiments.

Dr. J. M. Swaine, of the Department of Entomology of Canada, arrived April 30, to spend a few days in the Museum, studying the types of Cerambycidae belonging to the genus Leptura. He is preparing a revision of the long-horned beetles of this genus, and finds it necessary to consult the materials in our collection, especially type specimens described by the late Thomas L. Casey.

Dr. Herbert Osborn, of Columbus, Ohio, spent a few hours on April 27 in the section of insects, consulting with some of the Bureau specialists.

# FOREST INSECT INVESTIGATIONS

### F. C. Craighead, Entomologist, in Charge

On April 28 the Branch of Forest Insects of the Bureau of Entomology was by invitation represented by a delegate to the National Committee on Wood Utilization, meeting in the Department of Commerce. This
committee was established about a year ago by President Coolidge, and
its secretary is Secretary Hoover of the U. S. Department of Commerce.
The Bureau of Entomology is not only represented in the advisory research
group, but it is a member of two subcommittees, those of the construction
industries group and the wood preservation group. Through the former
group the Bureau will be represented on the executive committee. Some of
the problems which will be referred to the Bureau of Entomology are a
closer utilization of lower grades of lumber, including sound wormy stock;
modification of city building regulations to prevent insect damage; and
greater utilization of wood treated with chemical preservatives.

In the week of April 5 William Middleton visited the Andorra Nurseries and the Willow Grove Laboratory station of the Pennsylvania State Department of Agriculture, to continue work on the control of the boxwood leaf miner. Material from boxwood that was fumigated last fall was examined, and considerable material was treated with hydrocyanic-acid gas in canvas tents, specimens from these later fumigations being also studied.

#### TRUCK-CROP INSECT INVESTIGATIONS

# J. E. Graf, Entomologist, in Charge

william H. White, Associate Entomologist, of the Washington office, visited Chadbourn, N. C., to go over with Mr. Thomas the work on the seed corn magget on potatoes and the investigations under way on the mole cricket.

- J. E. Dudley, Jr., Associate Entomologist, in charge of the Madison, Wis., laboratory, is making plans to establish a summer research camp in the pea fields in the vicinity of Columbus, Wis., to investigate the pea aphis. Under this plan all of the employees will live at the camp and will be able to outline their experiments together.
- N. F. Howard, Associate Entomologist, in charge of the Mexican bean beetle laboratory, Columbus, Ohio, has transferred his laboratory from 2525 N. High Street to 151 W. 11th Avenue, directly opposite the University of Ohio grounds.
- C. O. Bare has been appointed Assistant Entomologist, and will be located at Plant City, Fla., where, under Mr. Boyden's supervision, he will investigate the celery leaf-tyer. He will work principally on the natural control of this insect, and investigate its natural enemies.

Oliver T. Deen and Perry K. Harrison have been appointed Junior Entomologists and stationed at Picayune, Miss., to fill the vacancies caused by the deaths of the late Messrs. McLemore and Mingee. Mr. Deen had formerly been employed at Gulfport, Miss., and had worked on the Australian tomato weevil. Mr. Harrison was previously employed by the Arizona State Department of Agriculture, and had been stationed at Yuma, handling interstate traffic between Arizona and California. These men will assist K. L. Cockerham in the eradication of the sweet-potato weevil.

- Fred P. Amsler, who had been given a temporary appointment with this Bureau, and who was engaged in scouting for the sweet potato weevil in Mobile County, Ala., and Hancock County, Miss., resigned April 4 to accept a permanent appointment with the Mississippi State Plant Board.
- K. L. Cockerham, Associate Entomologist, in charge of the work on sweet-potato weevil eradication in Mississippi and Alabama, reports that the infestations of the sweet-potato weevil in the Pearl River County area have been so greatly reduced that we will require only 64,000 plants for this spring as compared with 622,000 for 1925.

#### STORED-PRODUCT INSECT INVESTIGATIONS

## E. A. Back, Entomologist, in Charge

On April 6 Dr. Back gave a talk on the clothes moth problem before the Housekeepers! Alliance of Washington.

By request, Dr. R. T. Cotton attended on April 17 a demonstration fumigation of the sample rooms of the New York factory of one of the large candy manufacturing companies, to determine the effectiveness of calcium cyanide as a fumigant under the conditions prevailing in such places.

On April 22 Dr. Back visited a large woolen yarn and cloth manufacturing plant in Philadelphia, to investigate an outbreak of fabric pests, and to suggest methods of control suitable to local conditions.

#### TROPICAL AND SUBTROPICAL FRUIT INSECT INVESTIGATIONS

#### A. C. Baker, Entomologist, in Charge

- H. F. Willard, in charge of the Bureau's laboratory at Honolulu, is temporarily in Washington, going over plans of future work.
- H. K. Plank, formerly in charge of the Bureau's laboratory at New Orleans, La., resigned from the Bureau April 8, to accept a position with the Tropical Research Foundation in Cuba. His successor has not yet been appointed. A. W. Cressman has been placed in temporary charge of the Bureau's laboratory at New Orleans.

#### SOUTHERN FIELD-CROP INSECT INVESTIGATIONS

- J. L. Webb, Associate Entomologist, Acting in Charge
- Dr. W. V. King, of Mound, La., spent a few days in Washington about the middle of April. Before returning, he consulted with officers of the Marine Corps at Quantico, Va., at their request, concerning the advisability of attempting the control of mosquitoes at Quantico by applying arsenical dust to breeding places by means of airplanes.
- F. C. Bishopp was in washington several days about the middle of April, and presented a paper on cattle grubs before a meeting of representatives of various associations connected with the production of hides, skins, and leather, and representatives of the Departments of Agriculture and Commerce.
- G. L. Garrison has since the beginning of April been temporarily assisting in tobacco insect investigations at Quincy, Fla. It is expected that he will continue in this work until September.
- W. A. Stevenson and H. C. Young, of the Tallulah laboratory, have been assigned to work in Arizona on the Arizona cotton-boll weevil.
- V. V. Williams, of the Tallulah laboratory, was in the latter part of April assigned temporarily to work on the cotton perforator, <u>Bucculatrix thurberiella</u>, which is seriously damaging cotton in the vicinity of Calexico and El Centro, Calif., and in Lower California.

## DECIDUOUS-FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Associate Chief of Bureau, in Charge

The present status of peach pests in the Georgia Peach Belt was the subject of an address given by Oliver I. Snapp on April 9 at a meeting of the Kiwanis Club of Fort Valley, with peach growers of Peach County, Ga., as guests.

- Dr. F. H. Lathrop, in charge of the Bureau's blueberry maggot investigations in Maine, has now returned to his permanent headquarters, which the Bureau found it necessary to change from Harrington to Cherryfield, Me.
- C. B. Nickels, a graduate of Clemson College, S. C., has been appointed Assistant Entomologist, and is now associated with Dr. Lathrop in work on the blueberry maggot.
- Dr. Paul M. Gilmer, a graduate of Monmouth college and a post-graduate student of the University of Minnesota, has been appointed Associate Entomologist, and is now in immediate charge of codling moth investigations in Kansas, with headquarters at wichita.

#### BEE CULTURE INVESTIGATIONS

# James I. Hambleton, Apiculturist, in Charge

Visitors at the Bee Culture Laboratory in April included Dr. E. F. Phillips, of Cornell University, Frank C. Pellett, Associate Editor of the American Bee Journal, Hamilton, Ill., and Dr. N. A. Vappula, Entomologist of the Agricultural Institute, Tikkurila, Finland.

Virgil N. Argo has been granted a temporary appointment as Field Assistant of the Bureau of Entomology, to conduct investigations on the bee louse, Braula coeca, at New Windsor, Md.

#### LIBRARY

# Mabel Colcord, Librarian

# NEW BOOKS .

Agnew, M. A.

Workers in subjects pertaining to agriculture in State agricultural colleges and experiment stations, 1925-1926. Washington, Government printing office, 1926. 105 pp. (U.S. Dept. Agr. Miscellaneous Circ. No. 58, Office of Experiment Stations.)

Balfour, Andrew.

Some British and American pioneers in tropical medicine and hygiene. (Transactions of the Royal society of tropical medicine and hygiene, vol. XIX, No. 4, pp. 189-229, October 1925.)

Beijerinck, M. W.

Beobachtungen über die ersten entwicklungsphasen einiger cynipidengallen. Amsterdam, J. Müller, 1883. 198 pp. (Amsterdam. Koninklijk Akademie van Wetenschappen. Verhandelingen deel XXII, art. 4.)

Berlepsch, August.

William Me 2001 and Will

Die biene und ihre zucht mit beweglichen waben in gegenden ohne spatsommertracht...2 sehr verb. und mit genauesten sach-und autorenregistern verm. aufl. ... Mannheim, J. Schneider, 1869. 584 pp., illus.

Cappe de Baillon, P.

Contribution à l'étude des glandes segmentaires chez les insectes

(Dermaptères et orthoptères). (La Cellule, vol. 36 (vol. Jubilaire

V. Gregorio 2º partie), 1925, pp. 255-287.) Bibliographie, pp. 283-285.

Carter, H. J.

A check list of the Australian Tenebrionidae. (Australian Zoologist, vol. 4, pt. 3, pp. 117-163, pl. 16-17, Feb. 22, 1926.)

Christ, J. L.

Anweisung zur nützlichsten und angenehmsten bienenzucht für alle gegenden... 3. sehr. verm. und verb. aufl. Leipzig, J. B. T. Fleischer, 1798. 372 pp., 5 pl.

Delaigues, A.

... Le miel, production, récolte, conservation, vente, formulaire des remèdes, boissons et gateaux au miel. 5. ed. 1893-1924. Paris, librairie nouvelle, 1924? 47 pp., illus. (Encyclopedie d'agriculture. Nos. 5-6) (Union agricole, 30 année.)

Duda, Oswald.

Monographie der Sepsiden (dipt.). (Annalen des Naturhistorischen Museums. Wien, Bd. 39, pp. 1-153 incl., 7 pl., 1925.)

Ecological society of America.

Naturalist's guide to the Americas, prepared by the committee on the preservation of natural conditions, of the Ecological Society of America... Assembled and ed. by the chairman, Victor E. Shelford. Publication ed. Forrest Shreve... Baltimore, Williams & Wilkins, 1926. 761 pp.

Emery, C.

Hymenoptera. Fam. Formicidae, subfam. Formicinae. Brussels, 1925. 301 pp., 3 pl. (Wytsman, P., Genera insectorum fasc. 183.)

Faure, J. C.

... Les insectes des plantes potagères - procédés de lutte. Paris, Librairie de Progres agricole, n.d. 48 pp. (Bibliotheque Vermorel No. 129.) Fernald, H. T.

Applied entomology; an introductory text-book of insects in their relation to man. Ed. 2. N. Y. and Lond., McGraw-Hill, 1926. 395 pp., illus.

Ferriere, Charles. .

... Entomologie economique; les problemes modernes de la lutte contre les insectes et leur application en Suisse. Berne, Ernest Bircher Societe Anonyme, 1922. 36 pp. Index bibliographique, pp. 35-36.

Gebbing, Johannes.

Seidenraupenzucht... Leipzig, R. Voightlanders verlag, 1925. 163 pp., illus. "Literatur," p. 163.

Harrison, J. W. H.

The induction of melanism in the Lepidoptera and its subsequent inheritance (Proc. Royal Soc. Lond. Ser. B., vol. 99, No. 696, pp. 241-263, Feb. 1, 1926.)

Hoffler, Caspar.

(M. Caspar Hoffler's) Rechte bienen-kunst, aus Nicolai Jacob Schlesiers Tractat... Leipzig, F. Lanckischens erben, 1741. 346 pp.

Karny, H. H.

List of some katydids (Telligonidae) in the Sarawak Museum. (Sarawak Museum Journal vol. 3, Pt. 1, pp. 35-53, illus., pl., Dec. 1925.)

Kirsten, Gottlieb.

Vollstandige und deutliche anweisung zur zweckmassigsten und eintraglichsten betreibung der bienenzucht... Weimar, B. F. Voight, 1837. 198 pp., 9 fold. pl.

Leighly, J. B.

Graphic studies in climatology. 1. Graphic representation of a classification of climates. (Univ. of Cal. Pubs. in Geog. vol. 2, No. 3, pp. 55-71, illus., Feb. 24, 1926.)

Leuzinger, H., Wiesmann, R. and Lehmann, F. E.

Zur kenntnis der anatomie und entwicklungsgeschichte der stabheuschrecke Carausius morosus Br. Jena, Gustav Fischer, 1926. 414 pp. illus., pl. Martini, C. F.

Das ablegen der bienenstocke nach den neusten fahrungen ausfuhrlich erklar ... Leipzig, J. H. Haug, 1781. 138 pp.

Meyrick, E.

Lepidoptera- Heterocera. Fam. Gelechiadae. Brussels, 1925. 290 pp. 3 col. pl. (Wytsman, P. Genera insectorum fasc. 184.)

Moreira, Carlos.

Insectos coleopteros passalideos do Brasil... Rio de Janeiro, Imprensa nacional, 1925. 52 pp. illus.. pl. (Museu nacional do Rio de Janeiro. Fauna brasiliense, n. s. No. 1.)

Morgan, T. H. Evolution and genetics. Princeton, Princeton Univ. Press, 1925. 211 pp. illus.

Morgan, T. H.

The theory of the gene. New Haven, Yale Univ. Press, 1926. 343 pp., illus.

Needham, J. G. and Murphy, H. E.

Neotropical mayflies. Cincinnati, Ohio, 1925. 65 pp. 13 pl. (Lloyd Library Bull. 24. Ent. Ser. 4.)

Osborn, Herbert.

Neotropical Homoptera of the Carnegie Museum, Part 5. Report upon the collections in the family Cicadellinae, with descriptions of new species.

(Annals of the Carnegie Museum vol. XIV, No. 2 (Serial No. 128) pp. 155-237, illus., plates XI-XVI, March, 1926.)

Pearse, A. S.
Animal ecology. N. Y., McGraw-Hill, 1926. 417 pp. Bibliography, pp. 383-412.

Peragallo, A.

Etudes sur les insectes nuisibles à l'agriculture. Part 2. Nice, Typographie et lithographie Malvana-Mignon, 1925. 196 pp. col. pl.

Riehm, Johann.

Der praktische bienenvater... 4. aufl... Leipzig, G. Fleischer, den jungern, 1820. 242 pp. fold. pl.

Schiodte, J. C.

Genera et species af Denmarks Eleutherata... Kjøbenhavn, 1841. vol. 1., pl.

Shinoda, Osamu.

Contributions to the knowledge of the intestinal secretion of insects. I.

Mid-intestinal secretion of Lepidoptera, with an appendix: Behavior of Mitochondria in the mid-intestinal epithelium of the silkworm, Bombyx mori, L.

(Memoirs of the College of Science, Kyoto Imp. Univ. Ser. B, vol. II, No.
2, pp. 93-116, illus., pl. VII-X, 1926.) Bibliography, pp. 109-112.

Shinoda, Osamu.

Einige beobachtungen über die ernahrungsbiologie der wilden seidenraupe,
Dictyoploca japonica, Moore. (Memoirs of the College of Science, Kyoto
Imp. Univ. Ser. B. vol. II, No. 2, pp. 117-128, illus., 1926.)

Siler, J. F., Hall, M. W. and Hitchens, A. P.

Dengue; its history, epidemiology, mechanism of transmission, etiology,
clinical manifestations, immunity and prevention. Manila, Bureau of printing. 1926. 304 pp. 8 pl., fold. diagr. (Philippine Jour. Sci. vol. 29,
Nos. 1-2, January-February, 1926.)

Spitzner, J. E.

(M. Johann Ernst Spitzner's...) Ausfuhrliche theoretische und praktische beschreibung der korbbienenzucht... Hrsg. von Friedrich Pohl... 3.verb.aufl. Leipzig, J. C. Hinrichsche buchhandlung, 1823. 327 pp. 3 pl.

Stichel, Wolfgang.

Illustrierte bestimmungstabellen der deutschen wanzen (Hemiptera-Heteroptera) 1fg. 1-3. Berlin, Niederschonhausen, 1925.

Thomson, J. A.

The new natural history. N.Y. and Lond., G. P. Putnam's sons, 1926. vol. 1. pp. 326-336, Spiders; their work and ways; pp. 337-356, Social life of insects; pp. 357-360, The work of earthworms.

Walker, E. M.

The North American dragonflies of the genus Somatochlora. 202 pp. (University of Toronto Biological Studies No. 26).

Williamson, E. B. and Williamson, J. H.

The genus Perilestes (Odonata). 36 pp., plate. (Univ. of Mich. Museum of Zool. Misc. Pub. 14).

Wu. C. F.

Morphology, anatomy and etiology of Nemoura. Cincinnati, Ohio, 1923. 48 pp. 16 pl. (Lloyd Library Bull. 23. Ent. Ser. 3.)

Yokoyama, Kirio.

Studies on the Glyphodes pyloalis Walker of Japan. Contribution 1. Bionomics and external anatomies. Tokyo, Nov. 1925. pp. 47-101, pl. XII-XIV. (Bull. Imp. Sericultural Expt. Station vol. 2, No.2.)

Zacher, Friedrich.

Zuchtung von orthopteren. Berlin and Wien, Urban and Schwarzenberg, 1925? pp. 89-190. illus. (Sonderabdruck aus dem Handbuch der biologischen arbeitsmethoden, hrsg. von dr. Emil Abderhalden.)

Note. - Books often referred to in the correspondence of the Bureau of Entomology (with prices and publishers' addresses), an 11-page mimeograph list of current American works on entomology, has just been issued. Copies may be obtained from the Editorial Division of the Bureau upon request.